

**FOR**

**Decision: X**

## Issue

During its In-Camera Meeting (IC001-2021) on March 11, 2021, the NWMB decided to defer consideration of the Gulf of Boothia polar bear TAH until the polar bear Harvest Administration and Credit Calculation System (HACCS – referred hereafter as the Harvest Administration and Credit System) was approved. The NWMB considered the polar bear Harvest Administration and Credit System during the December 2021 Incamera Meeting and sent a decision to the Minister on February 1, 2021. The Minister accepted the NWMB decision on February 7, 2022. Now, with the Harvest Administration and Credit System decided, the NWMB is returning to the Government of Nunavut's 2021 Proposal on the TAH for the Gulf of Boothia polar bear subpopulation in the June 2022 meeting. The NWMB informed co-management partners about its intentions and specifically requested the the three Regional Wildlife Organisations and affected Hunters and Trapper Organisations to provide input on a regional TAH allocation.

The Gulf of Boothia polar bear subpopulation is one of the largest in Canada in terms of population size (see figure 1). With an estimated density of about 8.9 bears per 1,000 square kilometres, it is the highest known density of polar bears within any subpopulation in the world.

In 2005, the TAH for the Gulf of Boothia polar bear subpopulation was increased from 41 to 74 under the 2:1 male to female harvest ratio system. The 2005 increase in the TAH was following

the 1998–2000 population abundance estimate of 1,592 (range = 1,231–1,953) bears and harvest risk assessment that showed a significant population growth rate.

Until 2019, polar bears in Nunavut were managed using a 2:1 sex harvest ratio system where, for every two males harvested, only one female could be harvested. The sex harvest ratio was changed from 2:1 to 1:1 in the 2019/2020 harvesting season.

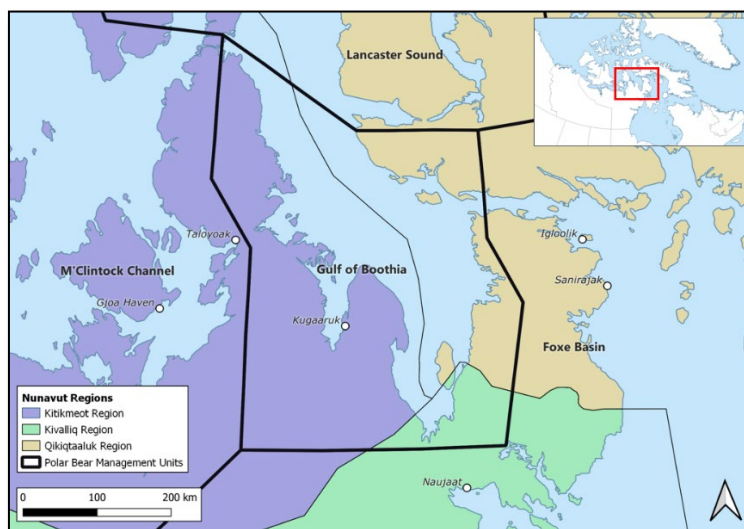


Figure 1. Map showing Gulf of Boothia polar bear subpopulation (black border in bold) and communities that harvest from it within the three Regions in Nunavut.

At the Nunavut Wildlife Management Board's Regular Meeting (RM001-2021) on March 10, 2021, the Government of Nunavut proposed that the Nunavut Wildlife Management Board makes no changes to the TAH of 74 polar bears for the Gulf of Boothia subpopulation to be harvested using the 1:1 male to female harvest ratio. The Government of Nunavut's proposal was based on results from a genetic mark-recapture biopsy survey of the Gulf of Boothia polar bears, carried out from 2015 to 2017, with a new abundance estimate of 1,525 (range = 1,231–1,819) which showed a stable population. The Government of Nunavut's proposal (TAB2B) included (1) a report of the 2015–2017 Government of Nunavut's study to estimate the Gulf of Boothia subpopulation abundance and (2) an account of the Government of Nunavut's in-person consultations with Hunters and Trappers Organizations in communities that traditional harvest from the population (Gjoa Haven, Sanirajak, Igloodik, Kugaaruk, Nauyasat, and Taloyoak).

During the NWMB's March 10, 2021 Regular Meeting, evidence and arguments were submitted the Government of Nunavut based on a science subpopulation abundance study (referred to above with the Government of Nunavut 2021 Proposal) including polar bear harvest records and credit status, and oral submissions from co-management partners. The NWMB also considered harvest data provided by the Government of Nunavut indicating an

average harvest rate of 63 polar bears per year since 2005 for the Gulf of Boothia. This harvest rate had resulted in the accumulation of 112 harvest credits for the management unit. An Inuit Qaujimajatuqangit study on Gulf of Boothia polar bears commissioned by the Government of Nunavut (TAB2C), was not ready by the time the proposal was prepared but was latter submitted on March 2, 2021 and considered by the NWMB<sup>1</sup>.

Regarding oral submissions, Environment and Climate Change Canada's recommended further assessment of harvest risk associated with the change from 2:1 to 1:1 sex harvest ratio. According to Environment and Climate Change Canada a harvest risk assessment was necessary giving that a TAH of 74 polar bears at a 1:1 harvest sex ratio increases the number of females to be harvested from the population with potential risks of population decline. The Qikiqtaluuk Wildlife Board's expressed concern with the Government of Nunavut's consultation process, stating that consultations were inadequate and information on credit resets was not raised. The Qikiqtaluuk Wildlife Board proposed a delay in the NWMB decision on a Gulf of Boothia TAH to allow more time for communities and Regional Wildlife Organisations to be fully informed by Government of Nunavut about effects of a new TAH on their accumulated credits. Credit reset after a new TAH is established has long been and remains part of polar bear harvest management in Nunavut but was was not part of the consultation.

During the NWMB's In-Camera Meeting (IC001-2021), on March 11, 2021, the NWMB deferred its decision (TAB2D) on the Gulf of Boothia polar bear TAH until the proposed polar bear HACCS was concluded. The NWMB's reasons for deferring the TAH decision was based on evidence and argument provided during the March 2021 Regular Meeting. The NWMB recognized the uncertainty regarding harvest credits accumulated by communities that harvest in the Gulf of Boothia due to the ongoing consultations on the polar bear Harvest Administration and Credit System. The NWMB recognized that a delay in the TAH decision would not have a negative impact on Inuit harvesting.

At the NWMB's In-Camera Meeting (IC004-2021) on December 10, 2021, the NWMB decided to approve Nunavut's Polar Bear Harvest Administration and Credit System. In the decision letter addressed to the Minister of Environment on February 1, 2022 (TAB2E), the Board also encouraged the Government of Nunavut and co-management partners to continue working together to improve polar bear harvest management and credit administration in Nunavut. The Minister accepted the NWMB decision and recommendations on February 7, 2022 (TAB2F).

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<sup>1</sup> During the December 2021 Regular meeting the Kitimeot Regional Wildlife Board presented a summary of key finding from the Inuit Qaujimajatuqangit study on Gulf of Boothia and M'Clintock Channel polar bears commisioned by the Government of Nunvat. The KRWB recommended that the NWMB considers Inuit Qaujimajatuqangit in its future decisions on the Gulf of Boothia polar bear subpopulation

The Harvest Administration and Credit System (TAB2G) replaces the 2019 Flexible Quota System, a form of which has been in use in Nunavut since 2005. The Harvest Administration and Credit System is a system that allows the Government of Nunavut to administer the portion of the polar bear TAH allocated to any given region or community. The purpose of the current Harvest Administration and Credit System is to administer changes to the polar bear harvest management in Nunavut resulting from the decision by NWMB in 2019 to change the sex-selective harvest ratio from 2:1 to 1:1<sup>2</sup>. The Harvest Administration and Credit System allows credits to be subtracted from the next year's base allocation when a community's annual base allocation is over-harvested or to accumulate in an under-harvest situation until a TAH is established, modified or removed in compliance with criteria in the Nunavut Agreement, at which point unused credits are reset to zero. The version of the Harvest Administration and Credit System approved by the NWMB in December 2021 was the second version. The first version was approved by the NWMB in September 2019 after revisions were made to the 2019 Flexible Quota System.

Following approval of the Harvest Administration and Credit System, the NWMB notified co-management partners on March 21, 2022, that it would return to consideration of the Government of Nunavut 2021 Proposal on the TAH for Gulf of Bothia during the June 2022 meeting. The NWMB specifically invited the three Regional Wildlife Organizations to provide input on how to split the TAH amongst the regions to prepare for a scenario where the NWMB decides to change the harvest limit for the Gulf of Bothia subpopulation. The Gulf of Boothia polar bear management unit encompasses the three Regions of Nunavut. In this kind of situation, the Nunavut Agreement (NA, s. 5.6.17(b)) directs the NWMB to express a total allowable harvest of a stock or population of a species ordinarily harvested by members of more than one HTO in terms of a regional total allowable harvest.

<b>Status</b>
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In March 2021, the Government of Nunavut proposed that the Nunavut Wildlife Management Board makes no changes to the TAH of 74 polar bears for the Gulf of Boothia subpopulation to be harvested using the 1:1 male to female harvest ratio. All written and oral submissions to the NWMB during March 2021 Regular Meeting (RM001-2021) remain part of the record for this proposal.

The NWMB approved the Nunavut polar bear Harvest Administration and Credit System and gave notice to the Minister on February 1, 2022. This resolved a key consideration for the NWMB's decision to defer the decision on the Gulf of Boothia polar bear TAH in March 2021.

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<sup>2</sup> The 1:1 harvest sex ratio allows females to be harvested up to 50% of the TAH. Male over harvest is not penalized in the 1:1 system as long as the TAH is not exceeded.

The NWMB provided notice to co-management partners on March 21, 2022, that it was returning to the Gulf of Boothia polar bear TAH decision-making process. In that notice, the NWMB invited the three Regional Wildlife Organizations and the affected Hunters and Trappers Organizations to provide input on splitting the TAH into three regional TAHs if the NWMB decides to change the harvest limit.

The NWMB will be considering written submissions as well as oral submissions provided during its June 15, 2022, Regular Meeting in addition to evidence and argument already submitted in March 2021.

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